

respectfully submit that allowable subject matter has been identified and request that the interference be declared.

Preliminarily, as requested by the Examiner, the specification has been amended to update the status of parent applications.

Additionally, the Examiner stated that the Information Disclosure Statements filed in the parent cases will not be considered unless they are filed with the present case and the references have been submitted. This appears to be contrary to MPEP § 609, page 600-103, specifically. As stated therein, information that has been considered by the Office in a parent application of a FWC filed prior to December 1, 1997 will be part of the file and need not be resubmitted to have the information considered. Likewise, an Examiner will consider information that has been considered by the Office in a parent application when examining a continuation under 36 C.F.R. § 1.60. The present application is a continuation under 37 C.F.R. § 1.60 of prior Application Serial No. 08/303,569, filed September 7, 1994, which is a continuation under 37 C.F.R. § 1.62 (i.e., FWC) of Application Serial No. 07/7443,329, filed September 17, 1991. According to MPEP § 609, then, information considered in both parent applications is to be considered by the Examiner.

Rejections Under 35 U.S.C. § 112, first paragraph

Claims 24-31 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. Applicants respectfully traverse this rejection for the reasons that follow. For the Examiner's convenience, the paragraphs are designated to correspond to the Examiner's paragraphs under this section.

a. The Examiner rejected claims 24 and 28 alleging that the specification does not provide support for the concept that only substitutions adjacent CDRs are envisaged. Claims 24 and 28 have been amended herein to recite that each of the donor amino acids to be replaced is adjacent a CDR or contributes to antigen binding as determined by X-ray crystallography. Support for these amendments can be found, *inter alia*, on page 38, lines 1-

12, and lines 23 through 38, of the application as filed. As is clear therefrom, the contribution to antigen binding can be indirect, e.g., by affecting antigen binding site topology or inducing stable packing, i.e., the residues are spatially near a CDR. On page 17, lines 9-11, of the application as filed, the extents of the heavy chain CDRs are taught. On page 6, lines 25-35, it is indicated that the heavy chain "framework comprises donor residues at at least one of positions 6, 23 and/or 24, 48 and/or 49...." Residue 49 is clearly adjacent a CDR. As evident from Figure 4, residues 6, 23, 24, and 48 contribute to antigen binding, as determined by X-ray crystallography. Applicants respectfully request that this rejection be withdrawn.

b. The Examiner rejected claims 27, 30, and 31, seeking evidence that CD3 is the same as "OKT3" and that CD4 is the same as "OKT4." Actually, one term refers to the antibody, while the other refers to the antigen bound. Specifically, OKT3 refers to a monoclonal antibody that recognizes the CD3 antigen and OKT4 refers to a monoclonal antibody that recognizes the CD4 antigen. Consistent therewith, on page 28, lines 19-22, of the application as filed, the testing of the ability of CDR-grafted OKT3 light chain to bind to CD3 positive cells is disclosed, and on page 52, line 29, of the application as filed, the reference "CD4 (OKT4)" is made. Applicants respectfully request that this rejection be withdrawn.

Claim 29 was rejected under 35 U.S.C. § 112, first paragraph, in view of the phrase "which specifically binds to an antigen with a binding affinity equivalent to that of a chimeric antibody formed from said donor immunoglobulin." The Examiner requested that Applicants point to support in the specification for the phrase. Claim 29 has been amended herein to recite that the binding affinity is "similar to that of" the donor. Support for this amendment can be found, *inter alia*, on page 48, lines 24-27 and page 51, lines 27-31 of the application as filed. Applicants respectfully request that this rejection be withdrawn.

Rejection Under 35 U.S.C. § 102(e)

Claims 24-31 were rejected under 35 U.S.C. § 102(e) in view of U.S. Patent No. 5,585,089 ("Queen et al."). Applicants respectfully traverse this rejection.

The Examiner observed that Queen et al. is entitled to priority back to "at least

12/28/90." (It is assumed that the Examiner meant 12/19/90, the filing date of the latest application designated as a continuation-in-part in the series of Queen et al. applications.) Although seeming to recognize that Queen et al. may not be entitled to a priority date earlier than 12/19/90, the Examiner, nonetheless, proceeded to argue that limitations recited in claims 24-31 are found in the earlier Queen et al. applications. The relevant inquiry for Queen et al. to be an appropriate reference under 102(e) is whether there is support for the claims *as allowed* in the priority applications, see MPEP 2136.03, p. 2100-85, citing *In re Wertheim*, 209 USPQ 554 (CCPA 1981), not simply whether the limitations can be found in the priority document. Regardless, Applicants maintain that the limitation "outside the Kabat and Chothia CDRs" is not found in, nor supported by, the priority documents.

This limitation requires that the framework residues to be replaced be outside both the Kabat and Chothia CDRs. As submitted in the Preliminary Amendment filed concurrently with the present application, however, the earliest Queen et al. applications do not teach, either explicitly or implicitly, that the framework residues to be replaced by donor **must be outside both** the Kabat and Chothia CDRs. Indeed, in the only example found in these early applications, and even in the specification of the Queen et al. patent as issued, changes were made to residues inside what Queen et al. denotes as CDRH1 of Chothia, i.e., inside a Chothia CDR. Considering that this limitation was required for patentability, Queen et al. cannot be entitled to a priority date earlier than the filing date of the application in which this limitation was first introduced, i.e., 12/19/90. Queen et al., thus, fails as a reference under 102(e) because, as also submitted in the Preliminary Amendment filed concurrently with the present application, Applicants are entitled to their GB priority date of 12/21/89.

Applicants respectfully request that this rejection be withdrawn.

Presentation of a Revised Proposed Count

Applicants present in Appendix A attached hereto a revised "Proposed Count." In compliance with 37 CFR §1.606, the revised proposed Count 1 is broader than any of claims 1-4, the broadest claims in the Queen patent, and as broad as any one of claims 24-31 being entered into the instant application.

The proposed count contains disjunctive or alternative language to cover the claim terminology of the two parties. Such counts were expressly approved by the Board in *Hsing v. Myers*, 2 USPQ2d 1861 (Bd, Pat., App. & Int. 1987). It is clear, however, that both alternatives are directed to the same invention as that claimed in the Queen patent.

(c) Identification of Claims Corresponding to the Count

Applicants identify all of the Queen patent claims 1-11 and applicant's claims 24-31 as corresponding to the Count and as being directed to the same patentable invention.

**(d) Application of the Terms of Applicants'
Disclosure to the Copied Claims**

In attached Appendix B, applicants illustrate the representative support in their present application disclosure for the limitations of their amended claim 24 substantially copied from Queen claims 1, 5, 9 and 10. There is, of course, additional support in applicants' application omitted for the sake of brevity.

(e) Applicants' Effective Filing Date

Applicants' present application, being a Rule 60 continuation, has the identical specification and drawings as that originally filed in U.S. application Serial No. 08/303,569, filed September 7, 1994, which is a U.S. national phase application stemming from PCT/GB-90/02017, filed December 21, 1990. The latter PCT application claimed priority benefit of GB national application Serial No. 89/28874.0, filed December 21, 1989.

In attached Appendix C is a diagram of support in applicants' 1989 GB application for each limitation of applicants' amended claims 28 and 29 which are also drawn to the same invention as proposed Count 1. Accordingly, applicants' effective filing date for their invention of Count 1 is 12/21/89, the filing date of their GB national application.

In view of the foregoing, Applicants respectfully submit that allowable subject matter has been identified and request that the Examiner advise them as soon as possible whether the Examiner intends to declare an interference between the present application and

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Queen et al. Specifically, the Examiner is requested to contact the undersigned at (215) 564-8352.

Respectfully submitted,

A handwritten signature in cursive script, reading "Doreen Yatko Trujillo".

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